to improve the implementation of ongoing non-conventional energy programmes; and

(c) what proportion of gobar and bio-gas plants installed for this purpose are not functioning in the country?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): (a) and (b) Of the total energy requirement of the country, traditional energy sources comprising fuelwood, agricultural residues and animal dung meet a substantial part of the energy requirement predominently in rural areas. Technologies such as biogas, more efficient chulhas, etc. will be able to improve the utilisation of these traditional sources. Non-conventional energy sources which include these as well as other renewable sources. such as solar energy, wind energy, biomass etc. can contribute substantially to the total energy requirement when the programmes in these areas lead to their widespread use.

Steps taken in this regard include *inter alia*, development and extension of newer methods and technologies for using local renewable sources such as fuel efficient smokeless chulhas, biogas plants, energy plantations, solar, thermal and photovoltaic devices, wind power and gasifiers, etc.

(c) Evaluation studies by independent agencies on the working of family-size biogas plants sometime ago in their assessment recorded that 84 per cent (on national average) biogas plants are functional. Of the balance only 5 per cent or less had structural problems and other had only temporary operational problems.

Coal stocks in the country

227. SHRIMATI JAYANTHI NATARAJAN: Will the Minister of ENERGY be pleased to refer to the answer to Unstarred Question 926 given in the Rajya Sabha on the 3rd August, 1987 and state whether there is an adequate quantity of coal stocks in the country to feed the proposed new power stations in Tamil Nadu with a capacity of 2000 MW in all?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): There are adequate coal reserves in the country to support substantial expansion of Thermal Power generation capacity. In so far as Tamil Nadu is concerned, new coal based Thermal Power Stations with a capacity of about 1500 MW have so far been provided with coal linkage. Further enhancement of coal based power generating capacity would depend on the development programme of new coal mines in Godavari valley and Talcher coalfields.

Hydel Power Generation

228. SHRI V. NARAYANASAMY: Will the Minister of ENERGY be pleased to state:

(a) whether hydel power generation during April-September, 1987 fell far short of the target; if so, to what extent; and

(b) whether Government have taken any steps to increase the power generation from thermal power stations to make good the losses; if so, what are the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI): (a) Hydel generation in the country during April. 1987 to September, 1987 was 26238 million units as against the target of 28930 million units which represents a shortfall of about 9.3 per cent.

(b) Various measures being taken to increase the thermal generation include additional plant-wise targets wherever possible, re-scheduling of planned maintenance, ensuring additional quantity of coal, bringing back units under forced outage and planned maintenance within the shortest

possible time. The overall target for thermal generation for 1987-88 has been increased by about 2.7 billion units.

Power Production in the Country.

229. SHRI CHIMANBHAI MEHTA: Will the Minister of ENERGY be pleased to state:

(a) what is the total power generated by the public sector and the private sector in terms of Mega Watts and percentage of the total power production in the country during the last three years;

(b) what is the total net loss suffered or profit made by these sectors during the last three years;

(c) whether it is a fact that the operational losses of public sector power plants are increasing; if so, what are the details thereof; and what are the reasons for the same; and

(d) what action is contemplated to minimise the losses?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRIMATI SUSHILA ROHATGI): (a) to (d) The information is being collected and will be laid on the Table of the House.

Import of Industrial Alcohol

230. SHRI P. N. SUKUL: Will the Minister of INDUSTRY be pleased to state:

(a) how much industrial alcohol was imported in the country during 1984-85, 1985-86 and 1986-87; and

(b) how much imported alcohol was given to each State?

THE MINISTER OF STATE IN THE DEPARTMENT OF CHEMICALS AND PETRO-CHEMICALS IN THE MINISTRY OF INDUSTRY (SHRI R. K. JAICHANDRA SINGH): (a) and (b) During 1984-85 no permission for import of industrial alcohol was given. However, during the period from February, 1985, to November, 1986 duty free import of denatured alcohol was permitted to actual users (industrial) and the actual import was 579,38,818 litres. The Statewise details of this import work out as under:—

S.No.	Name of the State	Quantity in litres
1.	Andhra Pradesh	46,68,386
2.	Delhi	69,89,471
3.	Dadra & Nagar Haveli	60,000
4.	Goa	23,800
5.	Gujarat	46,68,386
6.	Karnataka	30,31,669
7.	Madhya Pradesh	75,000
8.	Maharashtra	46,14,490
9.	Orissa	99,663
10.	Rajasthan	6,62,543
11.	Tamil Nadu	57,10,472
12.	West Bengal	3,19,22,887
	Total	5,79,38,818

Soviet Assistance for New Power Projects

231. SHRI D. B. CHANDRE GOWDA:
SHRI K. VASUDEVA PANICKER:

Will the Minister of ENERGY be pleased to state:

(a) whether the Soviet Union has recently offered to extend assistance for new power projects in India;

(b) if so, what are the details of the offer made by the Soviet Union;

(c) whether Government have since accepted the Soviet offer; and